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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/097,383	06/16/1998	KARE CHRISTIANSEN	PM254781	2876

7590 02/01/2002

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EXAMINER
SHAY, DAVID M

ART UNIT	PAPER NUMBER
3739	

DATE MAILED: 02/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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DATE MAILED:

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☑ This application has been examined ☑ Responsive to communication filed on October 4, 2001 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire —3— month(s), ——— days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1. ☐ Notice of References Cited by Examiner, PTO-892.
2. ☐ Notice of Draftsman's Patent Drawing Review, PTO-948.
3. ☐ Notice of Art Cited by Applicant, PTO-1449.
4. ☐ Notice of Informal Patent Application, PTO-152.
5. ☐ Information on How to Effect Drawing Changes, PTO-1474.
6. ☐ _____.

Part II SUMMARY OF ACTION

1. ☑ Claims 1-3, 8-15, + 18-25 are pending in the application.
   Of the above, claim(s) 6 is/are withdrawn from consideration.
2. ☑ Claims 4, 5, 16, 17, + 26 have been cancelled.
3. ☐ Claims _____ are allowed.
4. ☑ Claims 1-3, 7-15, + 18-25 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____. has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed _____, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. _____; filed on _____.
13. ☐ Since this application apppears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1, 19, 22, and 23 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Allemann et al.

3. Claims 7-9 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Gustafsson.

4. Claims 1-3, 7-10, 13-15, and 19 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Anderson et al.

5. Claims 2, 3, 10-12, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allemann et al in combination with Gustafsson. Allemann et al teach a lamp which output 400J/cm2 and uses filters including a water filter. Gustafsson teaches using circulating water to cool flash tubes and an optical fiber applicator with a convex tip. It would have been obvious to the artisan of ordinary skill to employ the lamp Gustafsson in the device of Allemann et al, since Allemann et al disclose no particular lamp and Alleman et al includes a water filter; to include a fiber optic to deliver the radiation, since this is not critical, provides no

unexpected result, and provides greater flexibility of placement of the subject and light **source than the lens arrangement of Allemann et al; and to provide concave or paralleliped shape at the light guide distal end, since these are** equivalent to the convex tip and provides no unexpected result, thus producing a device such as claimed.

6. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allemann et al in combination with Anderson et al and Mass. Allemann et al provide the teachings set forth above. Mass teaches a simmer power supply including a capacitor and resistor arrangement as claimed. Anderson et al teaches the desirability of providing pulses wherein the ratio of the light power output to the time weighted average thereof is in the claimed range. It would have been obvious to employ the ratio of light power to time weighed average of light of power as taught by Anderson et al , since this provides more constant light distribution; to employ a simmer circuit as taught by Mass, since this enables flash lamps to be operated such that pulses with the desired ratio can be produced and to employ a discharge switch, since these are notorious for triggering flash lamps, thus producing a device such as claimed.

7. .Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Allemann et al. Vassiliadis et al teach the desirability of employing an interlock on a filter. It would have been obvious to the artisan of ordinary skill to employ an interlock on the filter in the device of Allemann et al

since this would provide a safer device, thus producing a device such as claimed.

7. The rejections under 35 USC 112 fist and second paragraph are withdrawn in view of applicant's amendments .

Regarding the anticipation rejection based on Allemann e t al. the examiner respectfully notes the fourth full paragraph in column 2 on page 821 thereof. As stated therein, a 1000W/ lamp is used to illuminate on 8 mm diameter area. This gives (1000W/(((.8cm) squared) (3.14)) or 497.6W/square cm or 497.6J/square cm/sec. As stated in the advisory action, the claim as written does not require the pulse applied to the tissue to have the claimed fluence merely that a pulse of such energy be produced at some point by the device. Applicants conjecture regarding the reference to a 200 mw/square cm is noted but does not rebut the examiners point regarding the breadth of the claim, for the record, the examiner notes that the 200mw figure is referred to as the mean fluence, which would also be produced, by two 250 msec, 400W/square cm pulses delivered at half hour intervals.

Regarding the Gustafsson reference , applicant appears to be arguing that because the reference does not expressly state that the

water is a filter , and since light passed through the rhodamin is re-emitted, the device not read on the claims. The Examiner has maintained the rejection since, as set forth by Gustafsson, only the blue-green light is absorbed and re-emitted in the device, all other wavelengths (e.g. red, yellow) would not be absorbed thereby and would pass out of the device.

Regarding the combination of Allemann and Gustafsson, applicant argues that the devices would not be combined because Gustafsson teaches a high intensity lamp, while "Allemann teaches applying a low intensity of light for some 2,000 sec." The examiner respectfully notes, applicants conjecture regarding the operation of the lamp of Allemann notwithstanding , that a 1000 watt light puts out enough continuous power to brightly light 20 by 20 foot room. Application of that much power continuously to a .64 square centermeter area would not result in a procedure which could be termed "photodynamic therapy" nor is it clear why or how Alleman would apply only. .02% of the lamps output to the animals on a continuous basis. It is further noted that Gustafsson clearly states that continuous wave lamps can be used (see column 2, lines 17-19) making the combination totally appropriate , even given applicant's unlikely scenario. The examiner regrets any misconmmunications

resulting from use of the term "no particular lamp". While Allemann clearly discloses a xenon lamp (incidentally the same type used by Gustafson – see column 3, lines 7-9), no particulars of the structure of the lamp, other than the use of xenon and a filter, are disclosed, while Gustafsson includes a discription of reflector, cooling, and delivering systems in his lamp description. Thus the combination is deemed wholly proper.

Regarding the Anderson reference, the examiner notes firstly that lasers are listed as an exemplary light source (see column 2 lines 20-25) and that flash lamps are recognized equivalents of lasers in the art. and secondly that the solid state lasers listed by Anderson at column 10 lines 6-8 include a flash lamp, thus reading on the claims.

8. Applicant's arguments with respect to claims 1-3, 7-15 and 18-25 have been considered but are moot in view of the new ground(s) of rejection.

This is a Request for Continued Examination of applicant's earlier Application No.09/097,383. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE**

FINAL even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, event however, ~~event~~ will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to David Shay telephone number (703) 308-2215.

David Shay:bhw

January 15, 2002

DAVID M. SHAY
PRIMARY EXAMINER
GROUP 330

Attachment for PTO-948 (Rev. 03/01, or earlier)
6/18/01

The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the Notice of Allowability. Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, MUST be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings MUST be approved by the examiner before the application will be allowed. No changes will be permitted to be made other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in ABANDONMENT of the application.